

10

FIG. 1

664260 25E10100

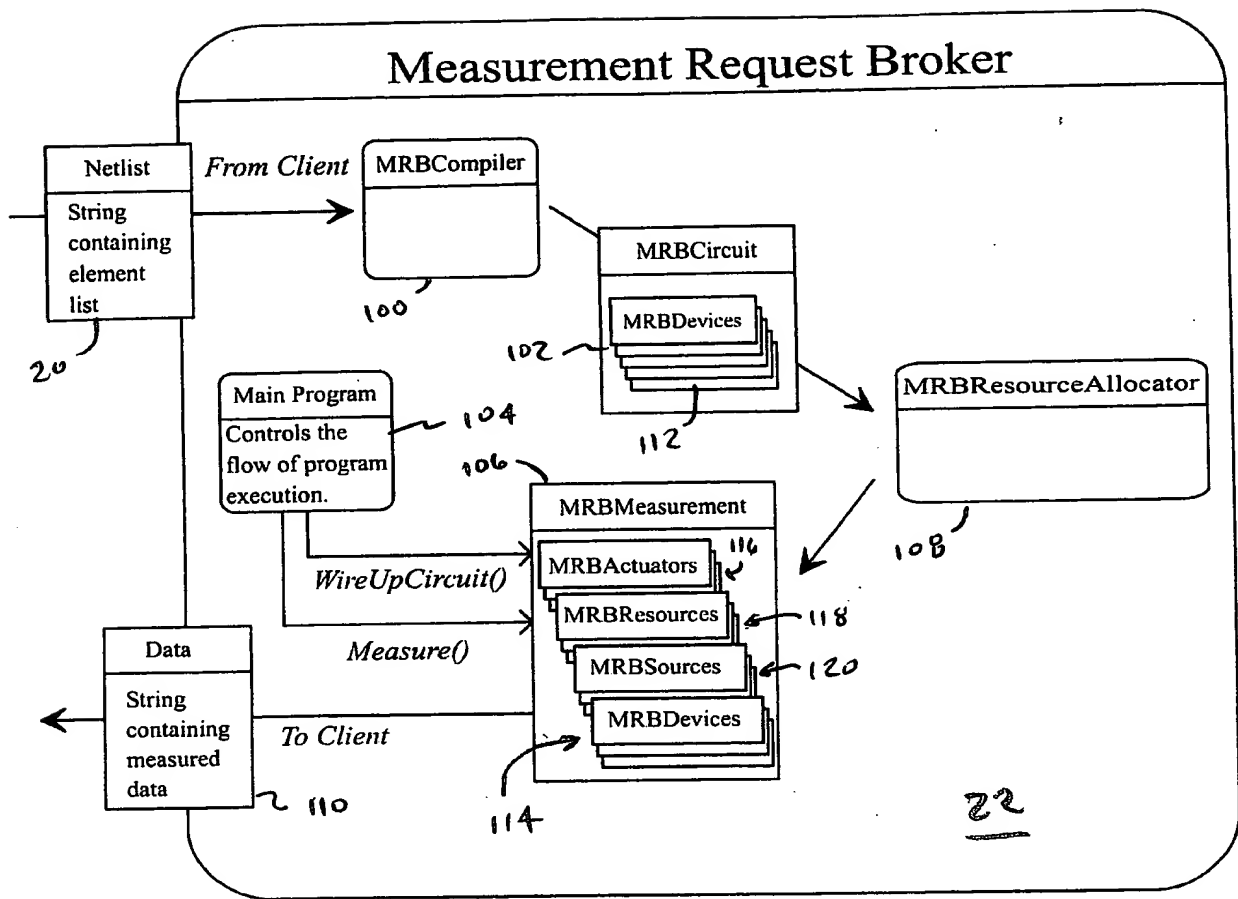


Figure 2.

When a user connects to the website they first see the following screen:

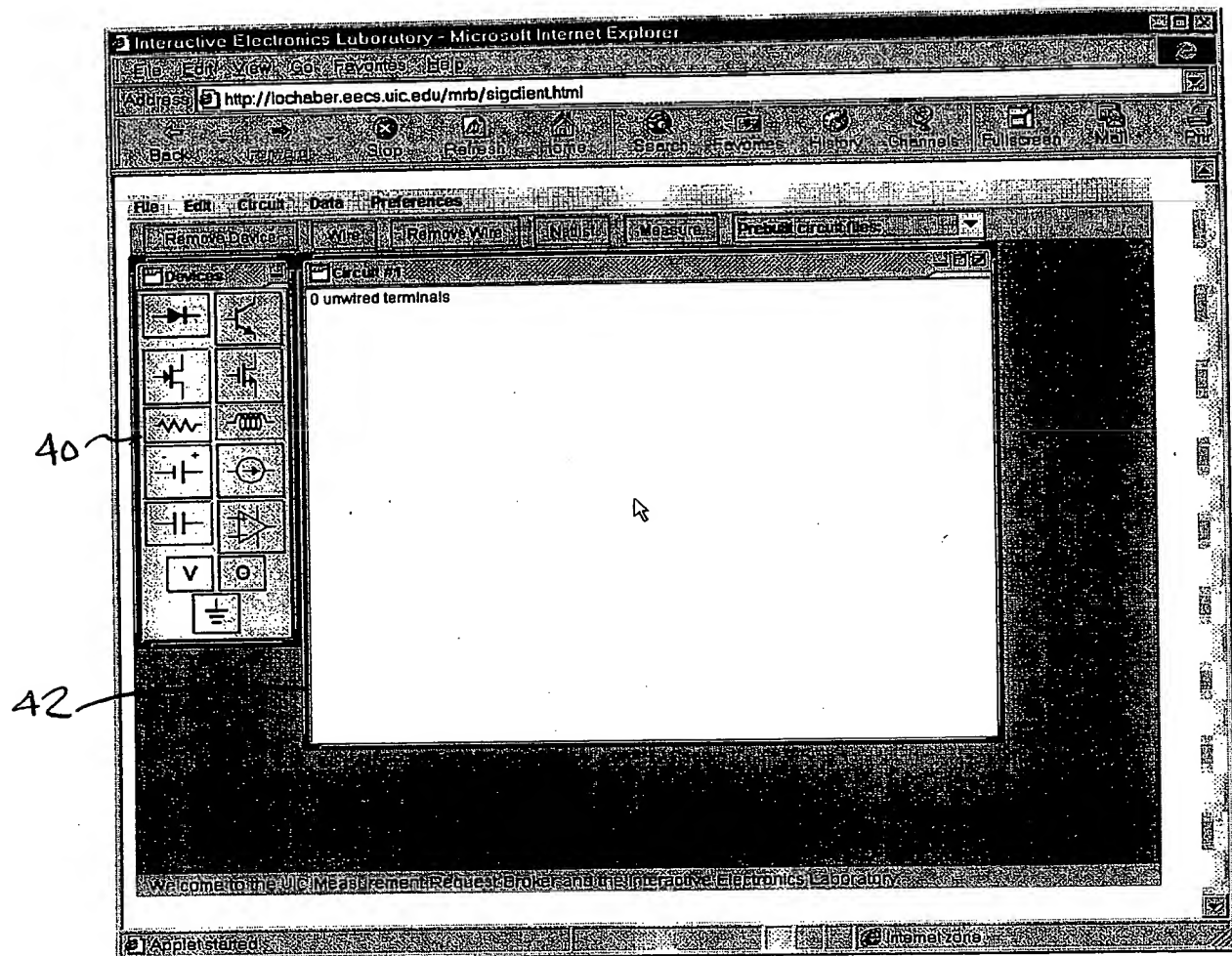
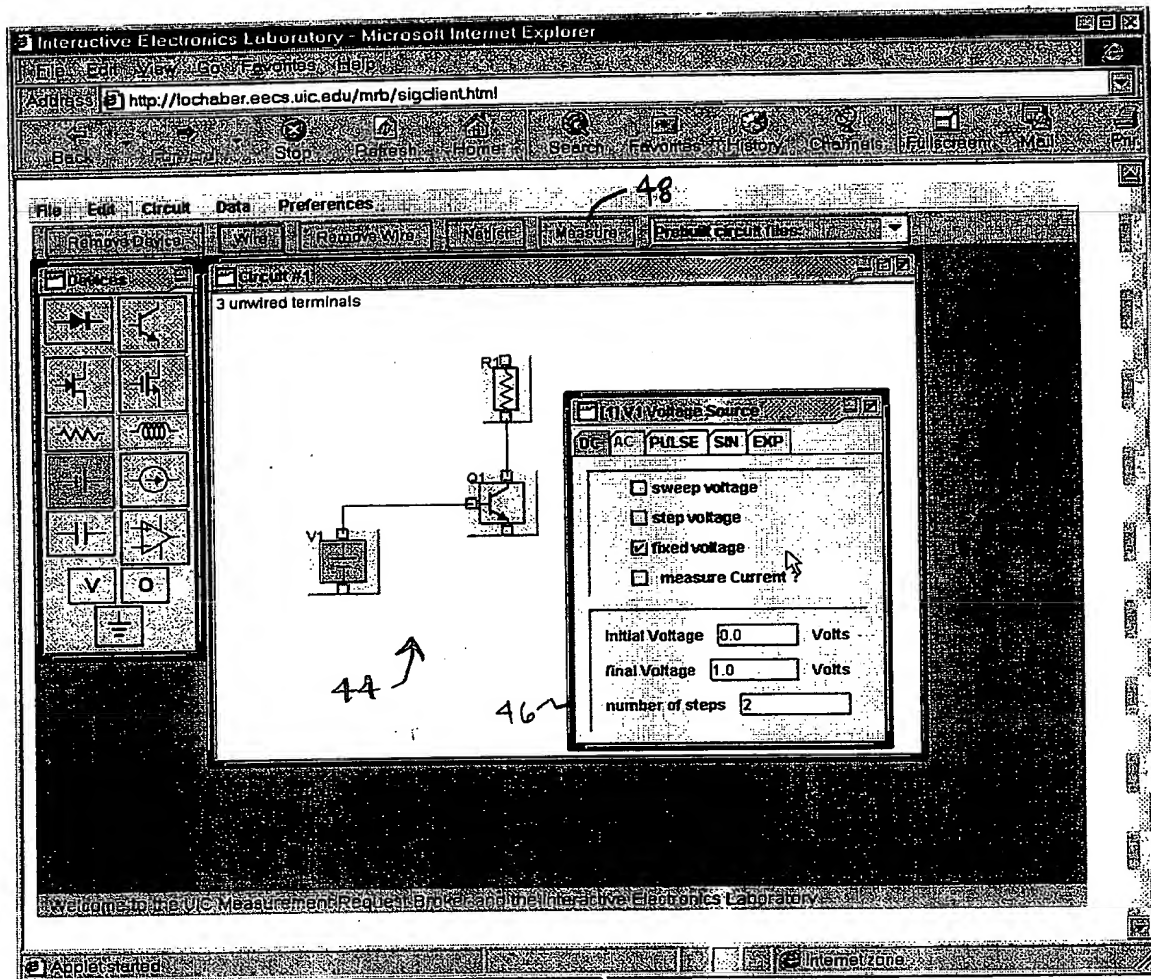


FIG. 3

Properties of devices such as voltage sources are adjusted by selecting the device and then filling in entries in a dialog box.



A complete set of instructions for drawing circuits is available online at the URL:
<http://www.mal.uic.edu/marble/building.htm>

FIG. 4

An alternative is to download a prebuilt circuit by selecting from the pulldown menu of: "Prebuilt circuit files:".

An example is the "Switching transient" circuit:

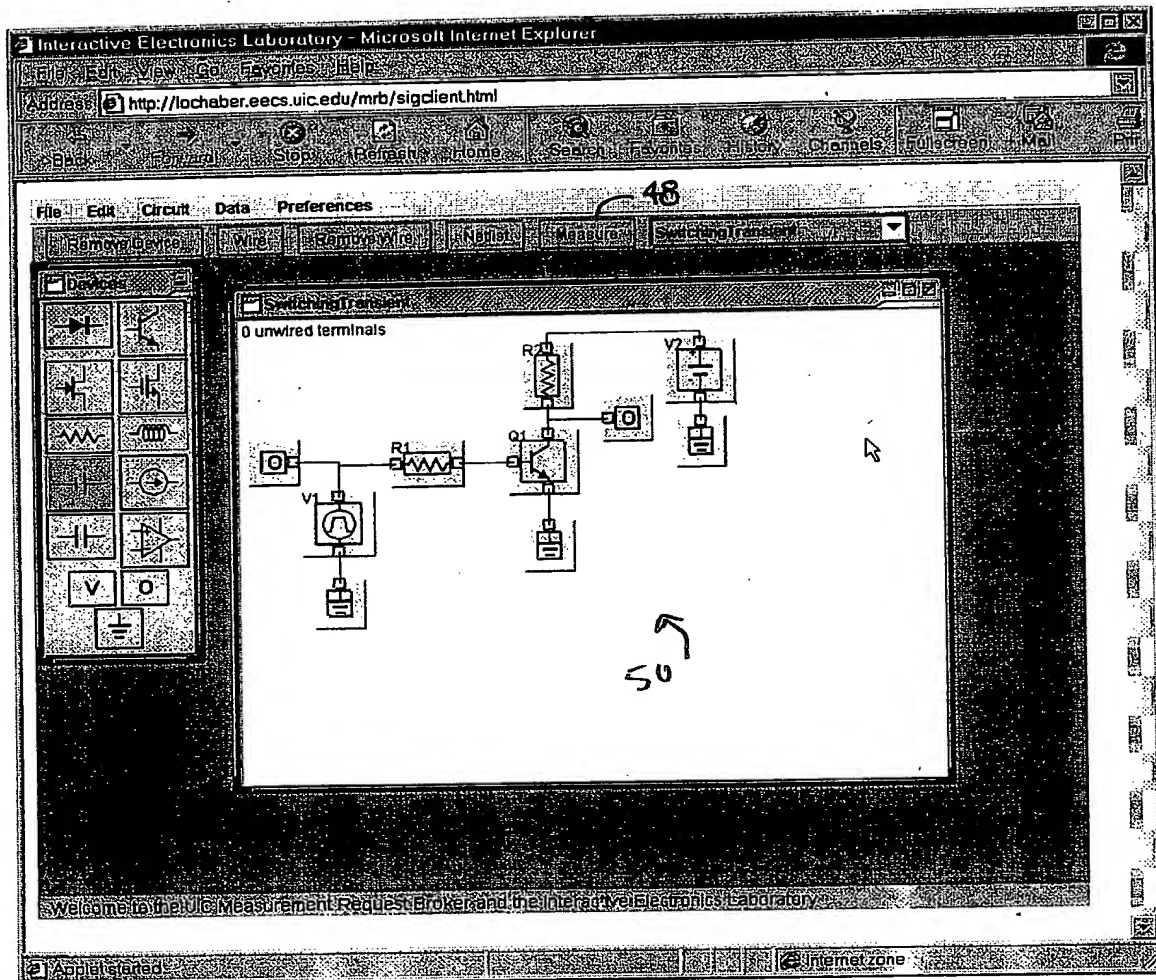


FIG. 5

The SPICE netlist associated with any circuit is viewable by selecting the "Netlist" button:

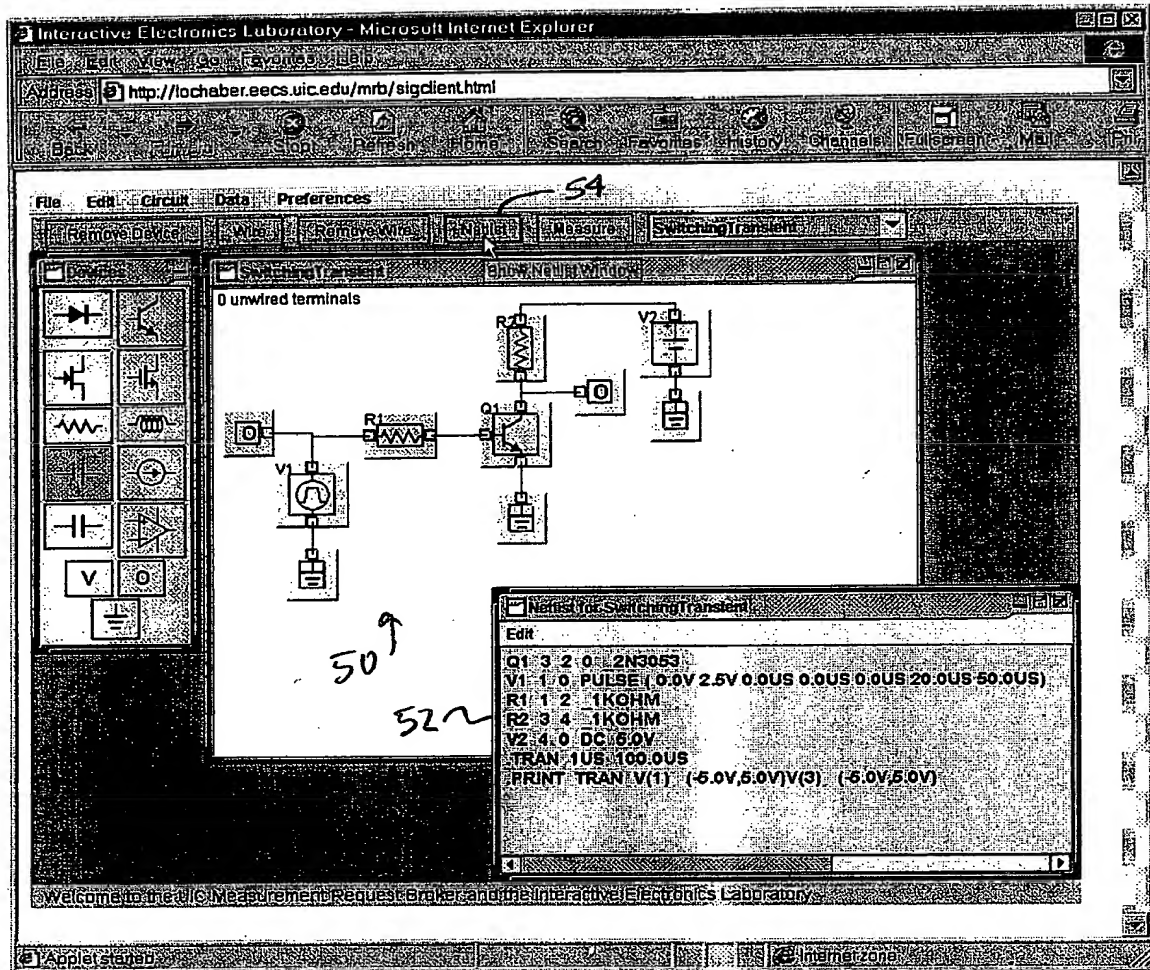
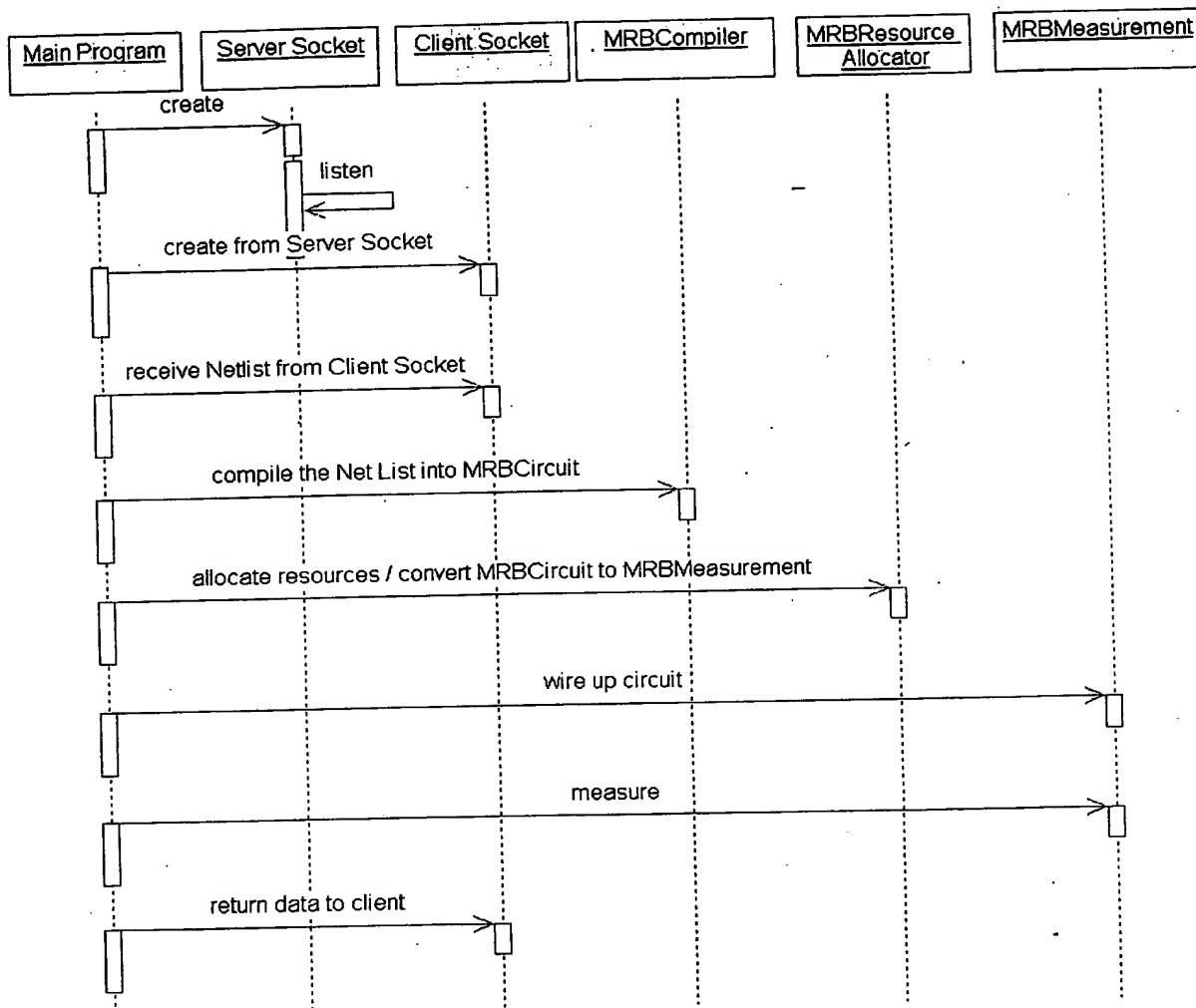


FIG. 6

Operation of the Measurement Request Broker (MRB) server program

The overall operation of the MRB during a single transaction with the client java applet is outlined in the sequence diagram below.



The operation of the MRBResourceAllocator and MRBMeasurement are summarized by the following two state diagrams.

FIG. 7

002200-25670460

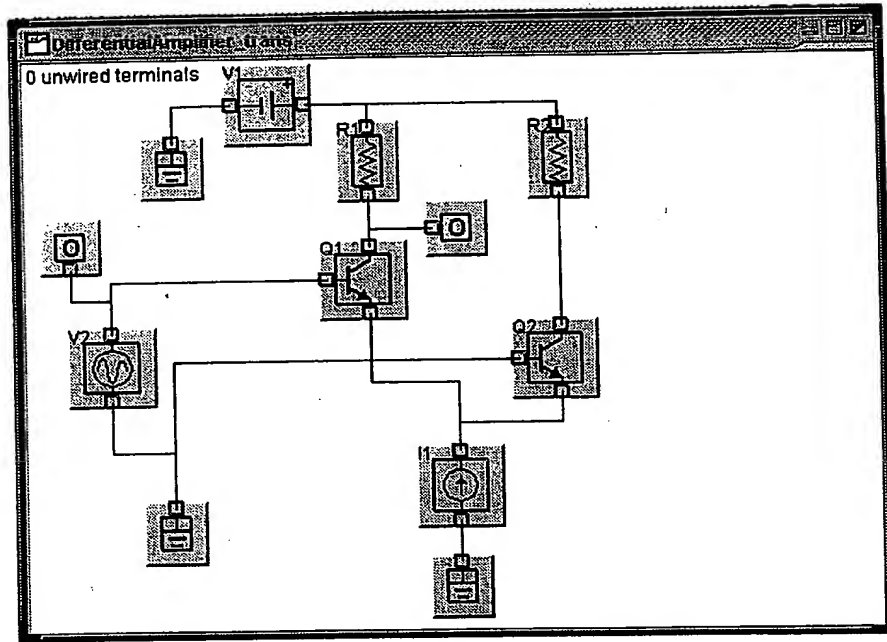


FIG. 8

Interactive Electronics Laboratory - Microsoft Internet Explorer

File Edit View Go Favorites Help

Address <http://lochaber.eecs.uic.edu/mrb/sigclint.html>

Back Forward Stop Refresh Home Search Favorites History Channels Fullscreen Mail

File Edit Circuit Data Preferences

Remove Device Wire Remove Wire Netlist Measure Switching Transient

Switching Transient

0 unwired terminals

Graph: Switching Transient

Graph Control Panel

Cursor 1

V1 0.195315 Volts 0.0

V3 3.1641 Volts 976543.1

Time 2.94E-5 Seconds

Show slopes

t sweep	V	
2.81E-5	0.195315	1.718
2.82E-5	0.195315	1.875
2.83E-5	0.195315	1.992
2.84E-5	0.158252	2.148
2.85E-5	0.195315	2.265
2.86E-5	0.195315	2.382
2.87E-5	0.195315	2.460
2.88E-5	0.195315	2.578
2.89E-5	0.158252	2.695
2.9E-5	0.158252	2.773
2.91E-5	0.158252	2.890
2.92E-5	0.158252	3.007
2.93E-5	0.158252	3.085
2.94E-5	0.195315	3.164
2.95E-5	0.158252	3.281
2.96E-5	0.195315	3.359
2.97E-5	0.158252	3.398
2.98E-5	0.158252	3.476

Devices

Just sent to the Measurement server a netlist on length 208 bytes

Apple started

Internet zone

FIG. 9